

IN THE CLAIMS:

1. (Previously Presented) A device for detecting the presence of a chemical leak, the device comprising an indicator element which is held in a first position by means of a failure element which is held in tension, the failure element being made of a material which fails in the event of a chemical leak, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide a rapid indication of the leak.
2. (Original) A device according to claim 1, wherein the indicator element is held in the first position by a biasing force, the biasing force acting to move the indicator element to the second position upon failure of the failure element.
3. (Original) A device according to claim 2, wherein the biasing force is provided by the resilience of the indicator element.
4. (Original) A device according to claim 3, wherein the resilient indicator element is a spring which is fixed to the failure element, the spring being under compression, such that the failure element is under tension.
5. (Original) A device according to claim 1, wherein the failure element is a tubular member.
6. (Original) A device according to claim 5, wherein the tubular member is sealed, the inside of the tubular member is maintained at a pressure other than atmospheric, and means are provided to monitor this pressure to determine the integrity of the tubular member.
7. (Previously Presented) A device according to claim 4, wherein the spring is attached to the failure element by a respective starlock washer at each end of the spring each washer being anchored to the failure element so as to be capable of movement in only one direction along the failure element.

8. (Previously Presented) A device according to claim 1, wherein the failure element is made of a material which changes its appearance in the presence of the leak.

9. (Original) A device according to claim 1, wherein the indicator element is held in the first position by a biasing force and wherein a further force, which is strong enough to override the biasing force is arranged to act on the indicator element to move it to the second position upon failure of the failure element.

10. (Original) A device according to claim 9, wherein the failure element is a tubular element and the indicator element is within the tubular element and is fixed at one end to the failure element, while its other end projects beyond the other end of the failure element and is biased away from the other end of the failure element.

11. (Original) A device according to claim 9, wherein the failure element and indicator element are arranged to be supported vertically, wherein the further force is gravity.

12. (Original) A device according to claim 1, wherein the failure element comprises a number of different materials arranged in series and/or in parallel.

13. (Previously Presented) A device for detecting the presence of a chemical leak, the device comprising a resilient indicator element which is held in a first position and is anchored in the first position by means of a failure element, the failure element being made of a material which fails in the event of a chemical leak, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide a rapid indication of the leak; wherein the failure element is longer in the direction in which the indicator element moves on failure of the failure element than it is in any other dimension.

14. (Original) A device according to claim 13, wherein the failure element is held in tension.

15. (Original) A device according to claim 13, wherein the indicator element is held in the first position by a biasing force, the biasing force acting to move the indicator element to the second position upon failure of the failure element.

16. (Original) A device according to claim 15, wherein the biasing force is provided by the resilience of the indicator element.

17. (Original) A device according to claim 16, wherein the resilient indicator element is a spring which is fixed to the failure element, the spring being under compression, such that the failure is under tension.

18. (Original) A device according to claim 13, wherein the failure element is a tubular member.

19. (Original) A device according to claim 18, wherein the tubular member is sealed, the inside of the tubular member is maintained at a pressure other than atmospheric, and means are provided to monitor this pressure to determine the integrity of the tubular member.

20. (Previously Presented) A device according to claim 17, wherein the spring is attached to the failure element by a respective starlock washer at each end of the spring each washer being anchored to the failure element so as to be capable of movement in only one direction along the failure element.

21. (Previously Presented) A device according to claim 13, wherein the failure element is made of a material which changes its appearance in the presence of the leak.

22. (Original) A device according to claim 13, wherein the indicator element is held in the first position by a biasing force and wherein a further force, which is strong enough to override the biasing force is arranged to act on the indicator element to move it to the second position upon failure of the failure element.

23. (Original) A device according to claim 22, wherein the failure element is a tubular element and the indicator element is within the tubular element and is fixed at one end to the failure element, while its other end projects beyond the other end of the failure element and is biased away from the other end of the failure element.

24. (Original) A device according to claim 23, wherein the failure element and indicator element are arranged to be supported vertically, wherein the further force is gravity.

25. (Cancelled)

26. (Original) A device according to claim 13, wherein the failure element comprises a number of different materials arranged in series and/or in parallel.

27. (Previously Presented) An arrangement for detecting the presence of a chemical leak over a predetermined area, the arrangement comprising a plurality of devices according to any one of the preceding claims arranged over the area.

28. (Original) An arrangement according to claim 27, wherein the devices are arranged substantially in parallel.

29. (Cancelled)

30. (Cancelled)

31. (Previously Presented) A method of detecting a chemical leakage comprising the steps of positioning a device according to claim 1 in a site of potential chemical leakage and monitoring the failure element to determine when it has moved to the second position indicating the presence of a leak.

32. (Previously Presented) A method of detecting a chemical leakage comprising the steps of positioning an arrangement according to claim 27 in a site of potential chemical leakage and monitoring each failure element to determine when it has moved to the second position indicating the presence of a leak.

33. (Currently Amended) A method of detecting leaks from a vessel in a filling station containing a potential source of chemical contaminants, the method comprising the steps of:

positioning a device in the ground beneath a vessel; and

monitoring [[the]] a failure element to determine when it has moved to a second position indicating the presence of a leak, whereby the device for detecting the presence of a chemical contaminant comprises an indicator element which is held in a first position by means of [[a]] the failure element which is held in tension, the failure element being made of a material which fails in the presence of the chemical contaminant, thereby releasing the indicator element from its first position and allowing it to move into a second position in order to provide an indication of the presence of the contaminant.

Please add the following new claims:

34. (New) A method of detecting leaks from a vessel in a filling station containing a potential source of chemical contaminants, the method comprising the steps of:

positioning a device in the ground beneath the vessel, the device having indicator element held in a first position by a failure element, the failure element is held in tension and is made of a material which fails in the event of a chemical leak, thereby releasing the indicator element from the first position to a second position in order to provide a rapid indication of the chemical leak; and

monitoring the failure element to determine when it has moved to the second position indicating the presence of the chemical leak.

35. (New) A method of detecting leaks from a vessel in a filling station containing a potential source of chemical contaminant, the method comprising the steps of:

positioning an arrangement in the ground beneath a vessel, the arrangement comprising a plurality of devices, each device having indicator element held in a first position by a failure element, the failure element is held in tension and is made of a material which fails in the event of a chemical leak, thereby releasing the indicator

element from the first position to a second position in order to provide a rapid indication of the chemical leak; and

monitoring each failure element to determine when it has moved to the second position indicating the presence of the chemical leak.